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ABSTRACT

In 1988, the American College Testing Program, together with the National Council of Instructional Administrators and the National Council for Student Development, initiated Project Cooperation (PC) to examine outcomes assessment strategies and measures of institutional effectiveness among two-year colleges. The first initiative of PC was a survey of two-year institutions nationwide to identify current and future efforts at student outcomes assessment. Among the two-year institutions designated by PC to serve as demonstration sites to develop student outcomes assessment models were Dyersburg State Community College (DSCC), in Tennessee; Midlands Technical College (MTC), in South Carolina; Orangeburg-Calhoun Technical College (OCTC), in South Carolina; and Technical College of the Lowcountry (TCL), in South Carolina. At DSCC, the model includes assessment of the general education proficiency of graduating sophomores, of entering students' basic skills, and of knowledge of DSCC programs, as well as 2-year follow-up studies of alumni, surveys of graduating sophomores, follow-up surveys of dropouts, and community surveys and focus groups. The critical success factors used at MTC to evaluate the college's performance include student satisfaction and retention; post-education success; community economic development; and organizational development. At OCTC, effectiveness is measured through student growth in general education knowledge from college entry to exit. TCL has developed a model assessment, orientation, and advisement program, and an assessment strategy which examines the correlation between entry and outcomes assessment instruments. A detailed review of the PC survey is provided. (PAA)

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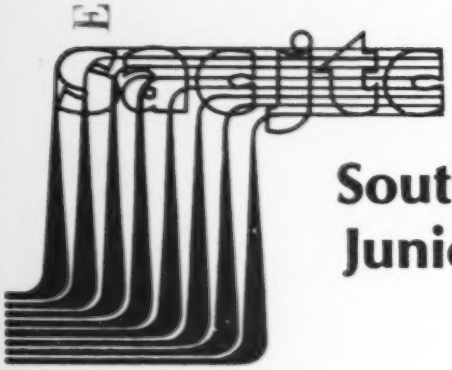

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Southern Association of Community, Junior, and Technical Colleges

Lex D. Walters, Editor
Volume 8, Number 2, October 1990

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The Use of Assessment to Determine Instructional Effectiveness

by Karen A. Bowyer

There has been an increasing emphasis on accountability and assessment of the effectiveness of higher education institutions during the past 10 years. The Tennessee Higher Education Commission implemented a Performance Funding Program in 1979 which required the assessment of student outcomes. The results of this assessment determined part of the funding for a public institution in Tennessee. In 1979 it began as 2% of an institution's appropriation. Now it is 5.45%. During the early 1980s the Southern Association of Colleges and Schools (SACS) led the other accrediting associations in establishing criteria related to institutional effectiveness. In 1988 the Secretary of the U.S. Department of Education mandated that outcomes assessment had to be included in accreditation standards for all regions that wished to continue receiving federal funds. The regional accrediting associations have been joined by the disciplinary accrediting associations in their focus on outcomes assessment.

The American College Testing Program (ACT) formed a partnership in 1988 with the National Council of Instructional Administrators (NCIA) and the National Council for Student Development (NCSD) to answer questions about outcomes assessment and institutional effectiveness. NCIA and NCSD are councils which are affiliated with the American Association of Community and Junior Colleges (AACJC). This joint effort has been named Project Cooperation. The following members of Southern Association of Community, Junior and Technical Colleges (SACJTC) are demonstration sites of Project Cooperation which have been designated to develop models for using student outcomes measures to assess institutional effectiveness: Dyersburg State Community College in Tennessee and Midlands Technical College, Orangeburg-Calhoun Technical College and Technical College of the Lowcountry in South Carolina.

The first major initiative of Project Cooperation was to survey the chief executive officers of members of AACJC in the fall of 1988 to determine the current and future status of assessment in the two-year colleges across the nation. The survey had a 54 percent response rate with 675 respondents. Those of you who responded will recall that the questionnaire had five sections. There were questions on three types of student outcomes measures in the first three sections: (1) Academic Progress and Employment Outcomes, (2) Student Learning Skills Outcomes, and (3) Student Satisfaction Outcomes. The use of the measures was examined in the fourth section and the fifth section contained questions on organizational patterns associated with specific assessment activities.

In the next few paragraphs I will highlight some of the results of the survey to give the reader a sense of the current use of student outcomes measures to demonstrate institutional effectiveness.

In the first section on Student Academic Progress and Employment Outcomes the six items which received the highest ratings as very important measures of institutional effectiveness were (with 1 being most important, 2 is next, etc.):

1. Employer satisfaction with graduates
2. Employer satisfaction with job training/skills enhancement courses
3. The percentage of graduates who find employment in their major/field of study
4. The percentage of students who complete their intended program or degree at your institution
5. Grade point average of graduates who transfer relative to native students at four year institutions
6. Number of students who graduate with an associate degree.

Sixty-one percent (61%) of the respondents indicated that Student Academic Progress and Employment Outcomes were measured and used to assess institutional effectiveness in their institutions.

The two top measures chosen by respondents as indicators of institutional effectiveness to be used in the next 3-5 years were:

1. The percentage of students who complete their intended program or degree at your institution
2. The percentage of graduates who find employment in their major/field of study.

The second section dealt with Student Learning Skills assessment. The three basic skills receiving the most votes as very important measures for assessing institutional effectiveness were: writing skills, reading skills and arithmetic (computational) skills. The process skills with the top ratings for importance in measuring institutional effectiveness were: critical/analytical thinking skills, synthesis/integration skills and aesthetic appreciation skills. The percentage of use of these process skills outcomes to assess institutional effectiveness was very low with a range from 6.2 to 16.0%. In this section 43% of the respondents indicated that Student Learning Skills were assessed, but they were not used to assess institutional effectiveness whereas 34.5% indicated that they were used to assess the effectiveness of their institution.

The two measures marked as "most important" for determining institutional effectiveness within the next 3-5 years were:

1. General Education Competency (marked by 15.3% of the respondents)

2. Field of Study Competency (marked by 12.5% of the respondents).

When asked to rate the level of satisfaction at their college on how measures of Student Learning Skills (Section II) were used for assessing institutional effectiveness the respondents indicated a lower than medium score.

Currently, assessment seems to be focused on basic skills rather than process or general competency areas but in the future it is anticipated that the measurement of general education and field of study competencies will surpass basic skills.

It was found in Section III that 44% of the institutions do not use Student Satisfaction Outcome measures to assess institutional effectiveness while 55% of them do.

The three Student Satisfaction measures which were identified as most important for current and future use in assessing institutional effectiveness were:

1. Satisfaction with curriculum in general

2. Satisfaction with courses in major area of study

3. Satisfaction with faculty.

The results of the first three sections of this survey confirm what many of us might have anticipated. Basic skills are most often measured and used to determine institutional effectiveness. These skills are usually measured at entry and sometimes at levels.

Respondents indicated medium satisfaction with how Student Satisfaction Outcomes (Section III) and Academic Progress and Employment Outcomes (Section I) are currently used to assess institutional effectiveness. There is very little assessment being done which can be used to determine "value-added."

Section IV of the survey was designed to determine how institutions use the various types of student outcomes information. Respondents were asked to choose from twenty-five typical activities and functions of an institution to show where each type of outcome measure was used. The top uses of Academic Progress and Employment Outcomes were for accreditation studies/reports, institutional planning and curriculum development.

In Part B of Section IV the respondents indicated that curriculum development was the activity most affected by the use of student outcomes measures. Academic Progress and Employment Outcomes were the measures most often mentioned in conjunction with the activity of curriculum development. The next most frequently mentioned activity was course placement. Student Learning Skills Outcomes were the measures used to make course placements.

When asked to anticipate the activities which would be most affected by the use of student outcomes measures in the next 3-5 years the respondents picked curriculum development and institutional planning as their top choices.

Section V was designed to determine how institutions are organized for measurement of student outcomes. A person or position was designated at 54.5% of the institutions to direct or coordinate assessment for the purpose of measuring institutional effectiveness. The three most frequently used titles were:

1. Director/Coordinator of Institutional Research (marked by 26.4% of the respondents)

2. VP/Director of Planning and Development (marked by 14.6% of the respondents)

3. Dean of Instruction (marked by 7.5% of the respondents).

In over half (52.9%) of the institutions this assessment position reports to the president. In 74.5% of the institutions the president was responsible for initiating the creation of the position. The position had been defined for less than one year in 25.9% of the cases, for three to five years in 17.8% of the institutions and for at least ten years in 17.0% of the institutions.

When asked to indicate under what circumstances the process of assessing institutional effectiveness was initiated, the three items most frequently marked were:

1. standard management practice (44.3%)

2. state officials (31.0%)

3. curricular reform (26.4%).

The major obstacles to assessing institutional effectiveness through student outcomes measures were lack of personnel resources (51.8%), lack of financial resources (48.4%), lack of adequate data base (44.6%) and lack of adequate measurement instruments (38.8%). Most institutions did not think that student unwillingness to cooperate in outcomes assessment was a problem. However, there is the problem of motivating students to do their best in institutions which require students to take various assessments when there are no consequences for the student.

The results of this survey show that there is considerable use of student outcomes measures to assess institutional effectiveness. The following four members of SACJTC which are demonstration sites of Project Cooperation have developed the models discussed below to assess institutional effectiveness.

1. Dyersburg State Community College (DSCC), Tennessee — A comprehensive analysis of the image of DSCC will be used to determine the effectiveness of the institution along with a broad based assessment program. The assessment program uses the following measures:

   — Assessment of the proficiency of graduating sophomores on a measure of general education outcomes using the ACT-COMP objective test

   — Assessment of entering student basic skills as a part of a mandatory assessment and placement program. Students exiting remedial or developmental classes are required to retake a different form of the placement exam to determine growth

   — Assessment of knowledge of the major field of career program areas

   — Follow-up of alumni two years after graduation using a survey developed for statewide use in Tennessee

— Interview and survey of graduating sophomores

— Student follow-up surveys to determine why students are dropping out.

Perceptions of the image of Dyersburg State will be gathered from six groups: business and industry leaders, general population, high school students, high school teachers and counselors, alumni and DSCC faculty and staff. A telephone survey of the general population will be conducted to determine their level of knowledge and impressions of Dyersburg State Community College. Focus groups will be the principal methodology used with the community.

Using the structured interview format of focus groups with business leaders, DSCC gained valuable information. This information will benefit DSCC in a number of ways, such as:

— The report was used in reformulating the institutional mission statement

— The College gained a list of attitudes, basic skills, and specific skills desired by employers which can be used in curriculum review

— College staff gained insight into the problems employers are having in providing training and what kinds of training they prefer

— Employers identified ways in which the College could provide training which is more useful and more accessible

— Employers identified specific courses Dyersburg State could offer their employees

— Employers shared their perceptions of the future of various industries and what training needs would be relevant

— The College gained insight into how it can support the increasing internationalization of business

— The College found that it had strong community support for keeping its technical programs up to date and keeping them available locally.

2. Midlands Technical College (MTC) in South Carolina — College performance will be measured relative to each of the following six critical success factors:

— Accessible, comprehensive programs of high quality

— Student satisfaction and retention

— Post-education satisfaction and success

— Economic development and community involvement

— Sound, effective resource management

— Dynamic organizational involvement and development.

A set of measurable criteria and indicators of effectiveness has been developed for each critical success factor at Midlands Technical College. The assessment plans are designed to:

— integrate entry assessment on the Collegiate Assessment of Academic Proficiency (CAAP) as closely as possible into the instructional program

— assess all students in entry-level mathematics and English classes on CAAP regardless of previous course work or completion of ASSET (almost one-third of the two-year student population have their entry skills assessed using this instrument.) Data on all entry-level students would then be available while allowing identification of first-time freshmen who had also taken ASSET in the research analysis

— conduct post-CAAP assessment upon completion of 60 quarter hours of credit and the general education core, since transfer students comprise twenty-five percent (25%) of the college population and few transfer students remain at Midlands Technical College through graduation.

3. Orangeburg-Calhoun Technical College in South Carolina —The goal is to measure growth in general education knowledge from entry to exit. Three components of the CAAP were administered to all associate degree candidates entering the college in fall 1989: Writing Skills, Numerical Skills and Reading Comprehension. After the CAAP results were received, counseling sessions were held to interpret the assessment scores and to explain that they would be used to measure progress. It is planned that the CAAP exit assessment will be conducted in March 1991 for students graduating in May and in June 1991 for those completing degrees in August. This schedule will provide enough time to interpret the results to the students.

All entering students take the ASSET test to determine placement into remedial, developmental or college level courses. Through the use of the ASSET test, the college provides a comprehensive advising, counseling, orientation and course placement program for entering students.

A study is conducted annually to determine the extent to which remedial and developmental courses prepare students for entry level general education courses.

4. Technical College of the Lowcountry (TCL) in South Carolina—The primary goal is to determine the correlation between the entry assessment instrument (ASSET) and an outcomes assessment (CAAP). TCL has developed a model assessment, orientation and advisement program using ASSET and has co-sponsored three national conferences on assessment and institutional effectiveness with ACT on Hilton Head Island. TCL's work with Project Cooperation helps the institution as it responds to the eighteen areas identified by the South Carolina Commission on Higher Education to be considered in determining institutional effectiveness. The eighteen areas are:

— General education

— Majors or concentrations

— Performance of professional program graduates on licensing and certification exams

— Reports of program changes that have occurred as a result of external program evaluation

— Alumni follow-up studies

— Entry-level skills necessary for college work

— Success of entering students in meeting college admissions prerequisites

— Remedial and developmental programs

— Achievement of students transferring from two to four year institutions

— Analysis of undergraduate retention and attrition

— Minority student and faculty access and equity

— Academic performance of student athletes

— Assessment of procedures for student development

— Assessment of library usage and collection development procedures

— Assessment of administrative and financial processes and performance

— Assessment of facilities

— Assessment of public service

— Assessment of research.

Project Cooperation at TCL has been named the Project for the Assessment of Collegiate Education (PACE). The critical ingredients in this project have been the outstanding positive involvement of the students in all phases of the project and the strong collaboration of the two major divisions of the college, Instruction and Student Development. These efforts were enhanced by a comprehensive public relations program.

The primary use of the assessment data collected for PACE will be the improvement of instruction to enhance student success. Project results will also be used in reports to meet institutional effectiveness criteria for the State Board for Technical and Comprehensive Education, SACS, the South Carolina Commission on Higher Education and other appropriate community constituencies.

SUMMARY

As the four case studies demonstrate, there is a need for multiple sources of assessment in order to get the full picture of institutional effectiveness. Institutions need to have concrete examples of using assessment results to improve the institution. These examples will help us weigh the costs and benefits of assessment.

Those of us in two year colleges have been mainly using standardized exams and surveys although utilization of focus groups, interviews and criterion-referenced instruments are broadening our list of measures. It is important that we focus on the process which produced the scores or outcomes rather than focusing on the scores. We can take a lesson from industry where quality is improved by improving the design of the product and the production process, not by just looking at the finished product. In this way we can determine what is working and have a better idea of how to allocate diminishing resources.

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